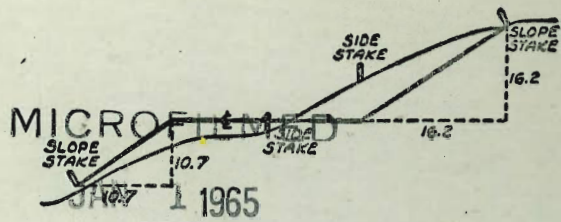


2208

SEWER

ARIZONA
CANYON



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING
SLOPE 1 TO 1. ROADWAY OF ANY WIDTH

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0
1	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	1
2	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	2
3	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	3
4	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	4
5	5.00	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	5
6	6.00	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	6
7	7.00	7.10	7.20	7.30	7.40	7.50	7.60	7.70	7.80	7.90	7
8	8.00	8.10	8.20	8.30	8.40	8.50	8.60	8.70	8.80	8.90	8
9	9.00	9.10	9.20	9.30	9.40	9.50	9.60	9.70	9.80	9.90	9
10	10.00	10.10	10.20	10.30	10.40	10.50	10.60	10.70	10.80	10.90	10
11	11.00	11.10	11.20	11.30	11.40	11.50	11.60	11.70	11.80	11.90	11
12	12.00	12.10	12.20	12.30	12.40	12.50	12.60	12.70	12.80	12.90	12
13	13.00	13.10	13.20	13.30	13.40	13.50	13.60	13.70	13.80	13.90	13
14	14.00	14.10	14.20	14.30	14.40	14.50	14.60	14.70	14.80	14.90	14
15	15.00	15.10	15.20	15.30	15.40	15.50	15.60	15.70	15.80	15.90	15
16	16.00	16.10	16.20	16.30	16.40	16.50	16.60	16.70	16.80	16.90	16
17	17.00	17.10	17.20	17.30	17.40	17.50	17.60	17.70	17.80	17.90	17
18	18.00	18.10	18.20	18.30	18.40	18.50	18.60	18.70	18.80	18.90	18
19	19.00	19.10	19.20	19.30	19.40	19.50	19.60	19.70	19.80	19.90	19
20	20.00	20.10	20.20	20.30	20.40	20.50	20.60	20.70	20.80	20.90	20
21	21.00	21.10	21.20	21.30	21.40	21.50	21.60	21.70	21.80	21.90	21
22	22.00	22.10	22.20	22.30	22.40	22.50	22.60	22.70	22.80	22.90	22
23	23.00	23.10	23.20	23.30	23.40	23.50	23.60	23.70	23.80	23.90	23
24	24.00	24.10	24.20	24.30	24.40	24.50	24.60	24.70	24.80	24.90	24
25	25.00	25.10	25.20	25.30	25.40	25.50	25.60	25.70	25.80	25.90	25
26	26.00	26.10	26.20	26.30	26.40	26.50	26.60	26.70	26.80	26.90	26
27	27.00	27.10	27.20	27.30	27.40	27.50	27.60	27.70	27.80	27.90	27
28	28.00	28.10	28.20	28.30	28.40	28.50	28.60	28.70	28.80	28.90	28
29	29.00	29.10	29.20	29.30	29.40	29.50	29.60	29.70	29.80	29.90	29
30	30.00	30.10	30.20	30.30	30.40	30.50	30.60	30.70	30.80	30.90	30
31	31.00	31.10	31.20	31.30	31.40	31.50	31.60	31.70	31.80	31.90	31
32	32.00	32.10	32.20	32.30	32.40	32.50	32.60	32.70	32.80	32.90	32
33	33.00	33.10	33.20	33.30	33.40	33.50	33.60	33.70	33.80	33.90	33
34	34.00	34.10	34.20	34.30	34.40	34.50	34.60	34.70	34.80	34.90	34
35	35.00	35.10	35.20	35.30	35.40	35.50	35.60	35.70	35.80	35.90	35
36	36.00	36.10	36.20	36.30	36.40	36.50	36.60	36.70	36.80	36.90	36
37	37.00	37.10	37.20	37.30	37.40	37.50	37.60	37.70	37.80	37.90	37
38	38.00	38.10	38.20	38.30	38.40	38.50	38.60	38.70	38.80	38.90	38
39	39.00	39.10	39.20	39.30	39.40	39.50	39.60	39.70	39.80	39.90	39
40	40.00	40.10	40.20	40.30	40.40	40.50	40.60	40.70	40.80	40.90	40
41	41.00	41.10	41.20	41.30	41.40	41.50	41.60	41.70	41.80	41.90	41
42	42.00	42.10	42.20	42.30	42.40	42.50	42.60	42.70	42.80	42.90	42
43	43.00	43.10	43.20	43.30	43.40	43.50	43.60	43.70	43.80	43.90	43
44	44.00	44.10	44.20	44.30	44.40	44.50	44.60	44.70	44.80	44.90	44
45	45.00	45.10	45.20	45.30	45.40	45.50	45.60	45.70	45.80	45.90	45
46	46.00	46.10	46.20	46.30	46.40	46.50	46.60	46.70	46.80	46.90	46
47	47.00	47.10	47.20	47.30	47.40	47.50	47.60	47.70	47.80	47.90	47
48	48.00	48.10	48.20	48.30	48.40	48.50	48.60	48.70	48.80	48.90	48
49	49.00	49.10	49.20	49.30	49.40	49.50	49.60	49.70	49.80	49.90	49
50	50.00	50.10	50.20	50.30	50.40	50.50	50.60	50.70	50.80	50.90	50

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE XIII—CORRECTIONS FOR TANGENTS AND EXTERNALS

These corrections are to be added to the approximate values, found by dividing the tangent, or external, for a 1° curve (Table VIII) by the degree of curve, in order to obtain the true tangents, or externals. Intermediate values may be obtained by interpolation.

FOR TANGENTS ADD

Central Angle	DEGREE OF CURVE													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.03	.06	.09	.13	.16	.19	.22	.25	.28	.31	.34	.38	.42	.46
15°	.04	.10	.14	.19	.24	.29	.34	.39	.45	.51	.53	.58	.63	.68
20°	.06	.13	.19	.26	.32	.39	.45	.51	.58	.65	.72	.79	.84	.90
25°	.08	.16	.24	.33	.40	.49	.58	.67	.75	.83	.90	.99	1.06	1.14
30°	10	19	29	39	49	59	69	79	89	99	1.09	1.20	1.29	1.39
35°	11	22	34	47	58	69	79	81	92	1.04	1.29	1.42	1.54	1.66
40°	13	26	40	53	67	80	93	1.06	1.20	1.34	1.49	1.64	1.79	1.94
45°	15	30	44	60	76	91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21
50°	17	34	51	68	85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48
55°	19	38	57	76	95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77
60°	21	42	63	84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07
65°	23	46	69	93	1.16	1.40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39
70°	25	51	76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72
75°	27	56	83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09
80°	30	61	91	1.22	1.53	1.84	2.15	2.46	2.78	3.10	3.44	3.78	4.12	4.46
85°	33	66	1.00	1.33	1.68	2.02	2.36	2.70	3.05	3.40	3.77	4.14	4.55	4.89
90°	36	72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4.10	4.50	4.91	5.32
95°	39	79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.40	4.98	5.38	5.83
100°	43	86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34
110°	51	1.03	1.56	2.08	2.61	3.14	3.67	4.21	4.76	5.31	5.86	6.43	7.01	7.60
120°	62	1.25	1.93	2.52	3.16	3.81	4.45	5.11	5.77	6.44	7.12	7.80	8.50	9.22

FOR EXTERNALS ADD

Central Angle	DEGREE OF CURVE													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020
15°	.003	.007	.010	.014	.018	.023	.027	.029	.032	.035	.039	.043	.047	.051
20°	.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083
25°	.009	.018	.027	.036	.046	.056	.065	.074	.083	.093	.106	.120	.127	.135
30°	.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188
35°	.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264
40°	.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341
45°	.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445
50°	.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550
55°	.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700
60°	.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851
65°	.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.771	.845	.922	1.01
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17
75°	.095	.182	.266	.353	.440	.528	.618	.707	.797	.887	.977	1.07	1.18	1.29
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20
95°	.174	.350	.522	.706	.885	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32

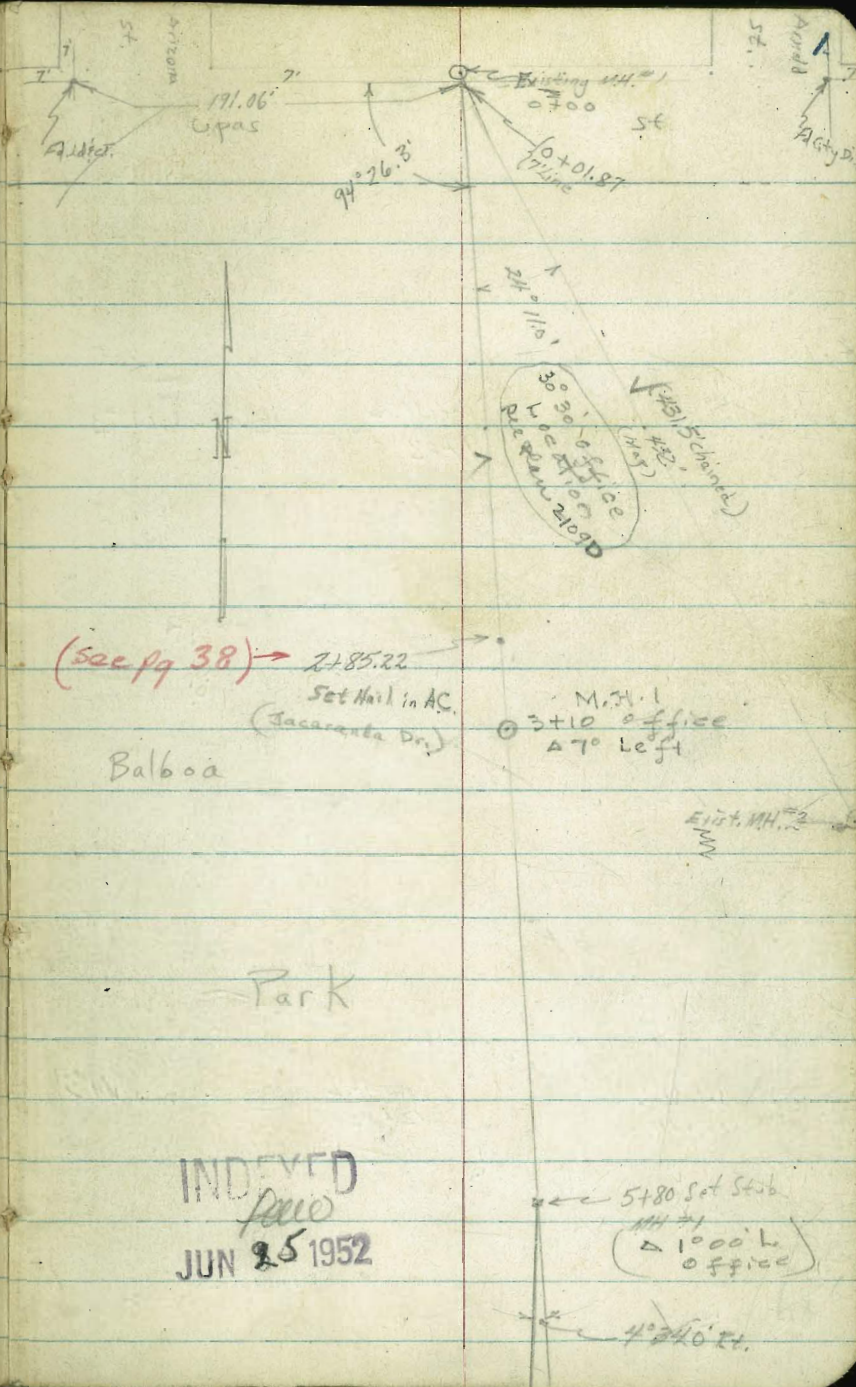
INDEX

Pgs

X - Sec. for Sewer - Ariz. St. Canyon Ballboa Park 1-29
 Stake Drain Ditch - Arizona Canyon 30
 Add'l notes - Sanitary Fill " " 41
 Alignment for Sewer in " " 58
 Locate road to Sanitary Fill " " 55

Roberts
Cota
Moore
Patten
6-19-52
NO. 20988

Survey for Proposed Sewer in
Arizona Canyon, Balboa Park
Begin in upas between Arizona & Arnold



Reduced
MB
7/11/52

INDEXED
JUN 25 1952

Mst. No. 3
Set Stub
9+02
A 2'00 W.
Office



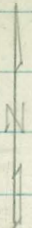
POT Set Stub
17+63.7

Set Stub
18+30

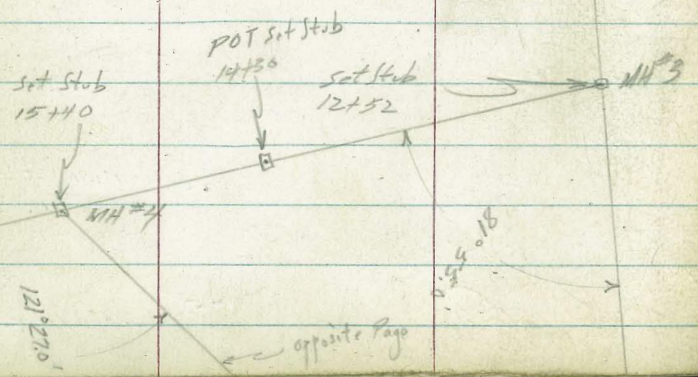
(6)

74' 0" HL

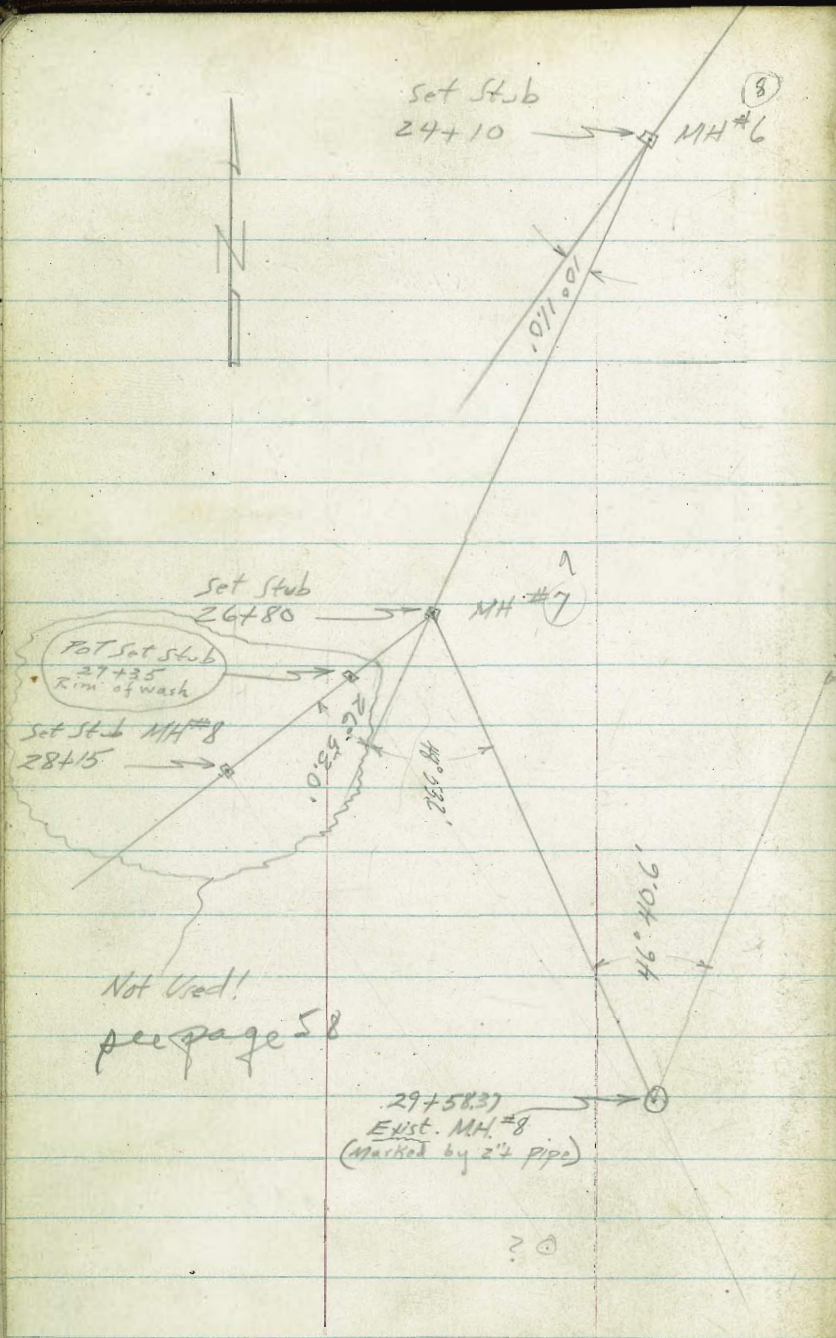
(7) 21+50 M. 24
P.O.T.
21+50



Next Page



opposite Page



Existing MH. #7

see page 58
Line Continued

? 0

Cont'd From Page 3

0+83

T.P.

5.40 $\left\langle \begin{array}{c} \downarrow \\ 268.58 \uparrow \end{array} \right\rangle$ 7.75 $\left\langle \begin{array}{c} \downarrow \\ 263.18 \uparrow \end{array} \right\rangle$

0+58

0+55. So. Edge A.C. Pav.

0+35

0+15± No. Cb Line Upas

0+00 Exist. V.H. in Upas

BM

0.98 $\left\langle \begin{array}{c} \downarrow \\ 270.93 \uparrow \end{array} \right\rangle$

269.95 ^{NWED}
Upas & Arizona

£

£

Rt #

264.6
40
20

265.4
32

266.3
23
20

$\left\langle \begin{array}{c} \downarrow \\ 268.58 \uparrow \end{array} \right\rangle$

264.1
6.8
20

264.7
6.2

265.3
5.6
20

263.45
7.48

264.07

6.86

263.85	263.47	263.56	263.40	263.59	264.06
7.08	7.46	7.37	7.53	7.34	6.87
13 Cb	13 Gutt	Rim	Invert	2 Gutt	2 Cb

$\left\langle \begin{array}{c} \downarrow \\ 270.93 \uparrow \end{array} \right\rangle$

Cont'd From Page 4

24

♀

RT 5

1749

4' RT to center 19" E.

1740

16' Lt to center 16" E.

1724

6³/₄' RT to center 16" E.

1720

7' Lt to center 19" E.

1707

{ 16' RT to center 10" E.
0.5' Lt to center 12" E.

1700

✓
259.6
9.0
20

✓
261.5
7.1

✓
262.6
6.0
20

0799

24" Euc. on ♀

0791

17³/₄' RT to center 36" Euc.

0790

✓
259.6
9.0
20

✓
261.6
7.0

✓
262.7
5.9
20

0783.5

19³/₄' RT to center 18" Euc. full

⟨ 268.58π ⟩

✓
⟨ 268.58π ⟩

Cont'd From Page 5

Lt

Q

Rt

6.

✓
258.82

3701

So. Edge A.C. Pav.

9.76

✓
260.07

2778

8.51

✓
260.11

2757

No. Edge A.C. Pav.

8.47

✓
260.8

2750

7.8

✓
260.9

✓
261.9

✓
262.6

✓
263.9

2700

7.7
20

6.7

6.0

4.7

12

20

1768

19' 1/4 to center 14" E.

✓
262.2

1750

6.4

✓
<268.58>

✓
<268.58>

Contd From Page 6

26

E

R 7

5438

252.8

9.5

5400

253.6

254.7

256.1

8.7

7.6

6.2

20

20

4450

256.6

5.7

T.P

3.94

<262.32 π>

10.20

<258.39 π>

<262.32 π>

4400

258.1

259.1

260.1

10.5

9.5

8.5

20

20

3450

259.6

9.0

3406

259.6

9.1

<268.58 π>

<268.58 π>

Cont'd From Page 7

8+00

7+50

7+00

6+65

6+27

6+00

5+80

114#1

on split

<262.32K>

26

✓
257.2

5.1
20

✓
257.3

5.0

✓
256.3

6.0

✓
255.3

7.0
20

✓
255.8

6.5

✓
255.6

6.7

✓
258.2

4.1

✓
253.6

8.7
20

✓
253.3

9.0
12

✓
257.6

4.7
4

✓
257.9

4.4
20

✓
260.6

1.7
20

✓
252.7

9.6
20

✓
252.7

9.6
18

✓
256.1

6.2
20

✓
257.5

4.8
20

✓
259.8

2.5
20

<262.32K>

✓
257.1

5.2
17

✓
258.3

5.0
20

✓
256.3

6.0

✓
255.8

6.5

✓
255.6

6.7

✓
258.2

4.1

✓
253.6

8.7
20

✓
253.3

9.0
12

✓
257.6

4.7
4

✓
257.9

4.4
20

✓
260.6

1.7
20

✓
252.7

9.6
20

✓
252.7

9.6
18

✓
256.1

6.2
20

✓
257.5

4.8
20

✓
259.8

2.5
20

<262.32K>

11+00

✓ 256.7 ✓ 257.7 ✓ 261.7 ✓ 261.1
 7.9 6.9 2.9 3.5
 20 8 20

10+40

✓ 260.9
 3.7

10+00

✓ 254.5 ✓ 255.3 ✓ 256.9 ✓ 259.8 ✓ 259.6
 10.1 9.3 7.7 7.8 5.0
 20 6 6 20

9+50

✓ 258.2
 6.4

9+02

MH #2

(Brush from here on)

~~XXXXXXXXXX~~ (onsplit)

✓ 253.9 ✓ 258.5 ✓ 258.7 ✓ 258.9
 10.7 6.1 5.9 5.7
 20 12 20

8+50

✓ 258.16
 6.5

T.P.

6.89 <264.56 T> 4.65 <257.67>
 <262.32 T>

<264.56 T>

Cont'd From Page 9

13+50

13+00

12+52 MH #3

(on split)

12+00

11+60

T.P.

6.88

<268.98x>

2.46

<262.10>

11+30

<264.56x>

24

E

27

10

✓
263.2

5.8

✓
258.2

10.8
20

✓
260.2

8.8

✓
261.8

7.2
20

✓
253.1

15.9
20

✓
256.5

12.5

✓
258.5

13.5
20

✓
255.5

13.5
20

✓
258.2

10.8

✓
260.1

8.9
20

✓
258.6

10.4

<268.98x>

261.8

2.8

<264.56x>

Cont'd From Page 10

15+00

14+88

14+65

14+30

14+00

F.P.

5.23

$\langle 269.84 \pi \rangle$

4.37

$\langle 264.61 \rangle$

13+77

$\langle 268.98 \pi \rangle$

Lt

R

R

11

250.4	248.7	250.2	262.4
19.4	21.1	12.6	7.4
20	11		20

259.2
10.6

263.4
6.4

265.9
3.9

262.9	265.7	265.9	264.7	264.6
6.9	4.1	265.9	5.1	5.2
20	8	3.9	6	20

$\langle 269.84 \pi \rangle$

265.5
3.5

$\langle 268.98 \pi \rangle$

Cont'd From Page 11

17+00

16+79

16+50

16+00

15+50

15+40 MH #4 on split

15+13

[269.84 π]

Lt

✓
244.1
25.7
20

✓
252.1
17.7

✓
257.6
12.2
20

✓
256.7
13.1

✓
257.5
12.3

✓
249.5
20.3
20

✓
258.8
11.0

✓
264.2
5.6
20

✓
259.9
9.9

✓
257.0
12.8
20

✓
258.1
11.7

✓
258.2
11.6
20

✓
251.8
18.0

[269.84 π]

Rt 12

Cont'd From Page 12

16

£

Pt

13

T.P.

5.51 $\left\langle \begin{array}{c} \downarrow \\ 262.90 \end{array} \right\rangle 7.32 \left\langle \begin{array}{c} \downarrow \\ 257.39 \end{array} \right\rangle$

18+30

MH #5

on split

252.4

12.3

20

257.4

7.3

260.4

4.3

20

18+00

261.1

3.6

T.P.

1.64 $\left\langle \begin{array}{c} \downarrow \\ 264.71 \end{array} \right\rangle 6.77 \left\langle \begin{array}{c} \downarrow \\ 263.07 \end{array} \right\rangle$

$\left\langle \begin{array}{c} \downarrow \\ 264.71 \end{array} \right\rangle$

17+63

263.0

6.8

17+40

261.0

8.8

17+11

255.5

14.3

$\left\langle \begin{array}{c} \downarrow \\ 269.84 \end{array} \right\rangle$

$\left\langle \begin{array}{c} \downarrow \\ 269.84 \end{array} \right\rangle$

Contd From Page 13

21+50

21+00

20+50

20+00

19+50

19+00

18+64

262.90

46

258.0
4.9

255.3
7.6
20

259.3
3.6

261.9
1.0
20

257.3
5.6

251.1
11.8
20

256.8
6.1

261.6
1.3
20

257.4
5.5

253.5
9.4
20

255.5
7.4
14

258.5
4.4

262.5
0.4
20

259.0
3.9

262.90

47 14

Cont'd From Page 14

Lt

Σ

Rt

15

23+50

✓
256.1
26.2

23+20

✓
255.9
7.0

23+00

✓
246.7
16.2
20

✓
253.4
9.5

✓
257.4
5.5
20

22+85

✓
251.7

11.2

22+45

✓
253.9
9.0

22+00

✓
250.3
12.6
20

✓
254.8
8.1

✓
258.6
7.3
20

21+82

✓
255.5
7.4

⟨ 262.907 ⟩

⟨ 262.907 ⟩

Contd From Page 15

26+50

26+00

25+50

25+00

24+50

T.P.

5.19

$\langle 262.56 \pi \rangle$

5.53

$\langle 257.37 \rangle$

on split
#6

24+10

MH #6

on split

$\langle 262.90 \pi \rangle$

Lt

R

R #6

resting checked

✓
254.9

7.7

✓
252.9

8.7
20

✓
256.9

5.7

✓
260.6

2.0
20

✓
257.6

5.0

✓
253.2

8.4
20

✓
257.2

5.4

✓
261.3

1.3
20

✓
257.4

5.2

$\langle 262.56 \pi \rangle$

✓
252.1

10.8
20

✓
257.4

5.5

✓
261.9

1.0
20

$\langle 262.90 \pi \rangle$

Cont'd From Page 16

28+00

T.P. 0.61 $\left\langle \begin{array}{l} 228.73 \text{ K} \\ 12.92 \end{array} \right\rangle \left\langle \begin{array}{l} 228.12 \\ \end{array} \right\rangle$

27+62

T.P. 0.62 $\left\langle \begin{array}{l} 241.04 \text{ K} \\ 12.92 \end{array} \right\rangle \left\langle \begin{array}{l} 240.42 \\ \end{array} \right\rangle$

27+50

27+00

T.P. 0.52 $\left\langle \begin{array}{l} 253.34 \text{ K} \\ 9.74 \end{array} \right\rangle \left\langle \begin{array}{l} 252.82 \\ \end{array} \right\rangle$ on skub
MH#7

26+80 MH#7

on split

$\left\langle \begin{array}{l} 262.56 \text{ K} \\ \end{array} \right\rangle$

Lt

218.6 8
10.1 220.8 ✓
20 7.9
221.9 ✓
6.8
20

$\left\langle \begin{array}{l} 228.73 \text{ K} \\ \end{array} \right\rangle$

231.1 ✓
9.9 233.7 ✓
20 7.3 234.1 ✓
6.9
20

$\left\langle \begin{array}{l} 241.04 \text{ K} \\ \end{array} \right\rangle$

235.1 ✓
18.2 236.7 ✓
20 16.6 237.0 ✓
16.3
20

248.9 ✓
4.4

$\left\langle \begin{array}{l} 253.34 \text{ K} \\ \end{array} \right\rangle$

249.4 ✓
~~251.4~~
13.2 252.9 ✓
20 9.7 255.9 ✓
6.7
20

$\left\langle \begin{array}{l} 262.56 \text{ K} \\ \end{array} \right\rangle$

Contd From Page 17

28+72

28+61

T.P.

0.88

$\langle 205.19 \pi \rangle$ 12.56 $\langle 204.31 \rangle$

28+57

28+49

Crude Truck Trail

28+32

28+30

TP

0.39

$\langle 216.87 \pi \rangle$ 12.25 $\langle 216.48 \rangle$
228.13 \checkmark

Lt

✓
197.6
7.6
20

✓
199.8
5.4
6

£ ✓
201.6
3.6

✓
202.9
2.3
20

Rt

18

202.0 ✓

3.2

$\langle 205.19 \pi \rangle$ ✓

✓
199.9
17.0
20

✓
201.7
15.2
4

✓
205.5
11.4

✓
207.3
9.6
15

✓
206.4
10.5
20

✓
206.1
10.8
20

✓
208.7
8.2

✓
206.8
10.1
20

✓
208.7
8.2

✓
210.1
6.8
20

✓
208.8
8.1
2

✓
211.3
5.6

✓
213.1
3.8
20

$\langle 216.87 \pi \rangle$ ✓

29758.37 Existing MH.

T.P.

8.29 $\langle 202.65 \uparrow \rangle$ 10.82 $\langle 194.36 \rangle$

29740

(Spill from borrow)

29712

29708

In the ditton this could change - this
looks to be a borrow area.

28791

$\langle 205.19 \uparrow \rangle$

184.42
(184.50 PLANS)
191.2
18.23 11.5 11.78
INVERT GRD. RM
MH.

$\langle 202.65 \uparrow \rangle$

194.3
10.9

193.7
11.5

192.8 193.6 195.7 197.1
12.4 11.6 9.5 8.1
20 6 20

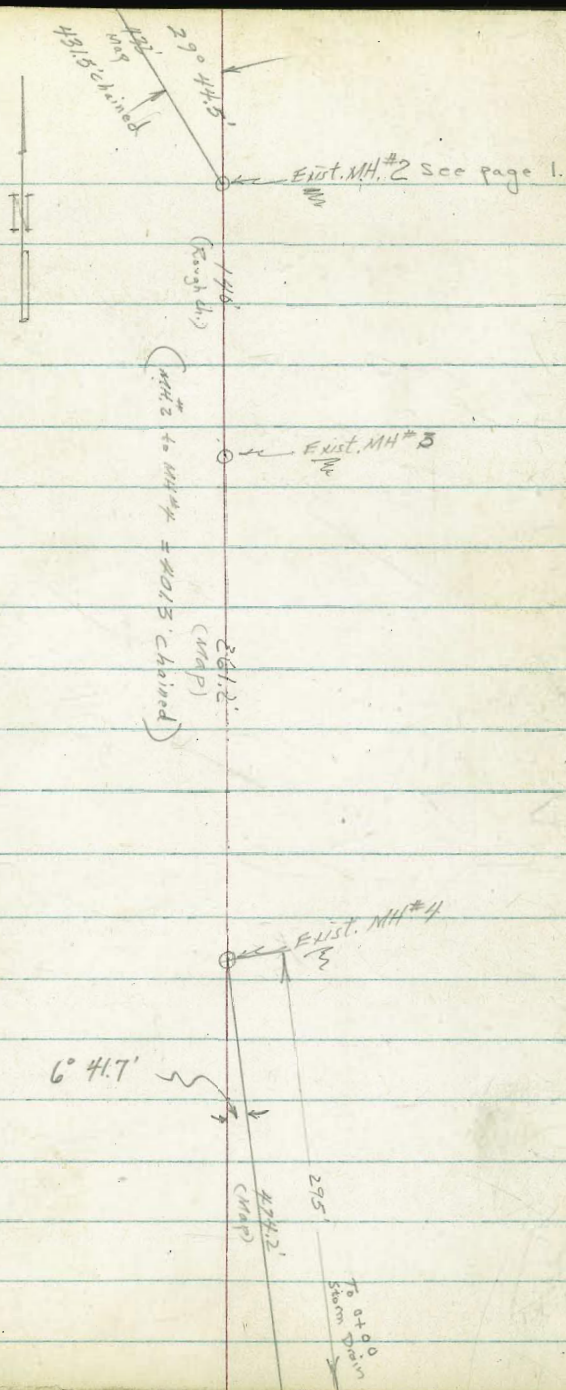
197.3

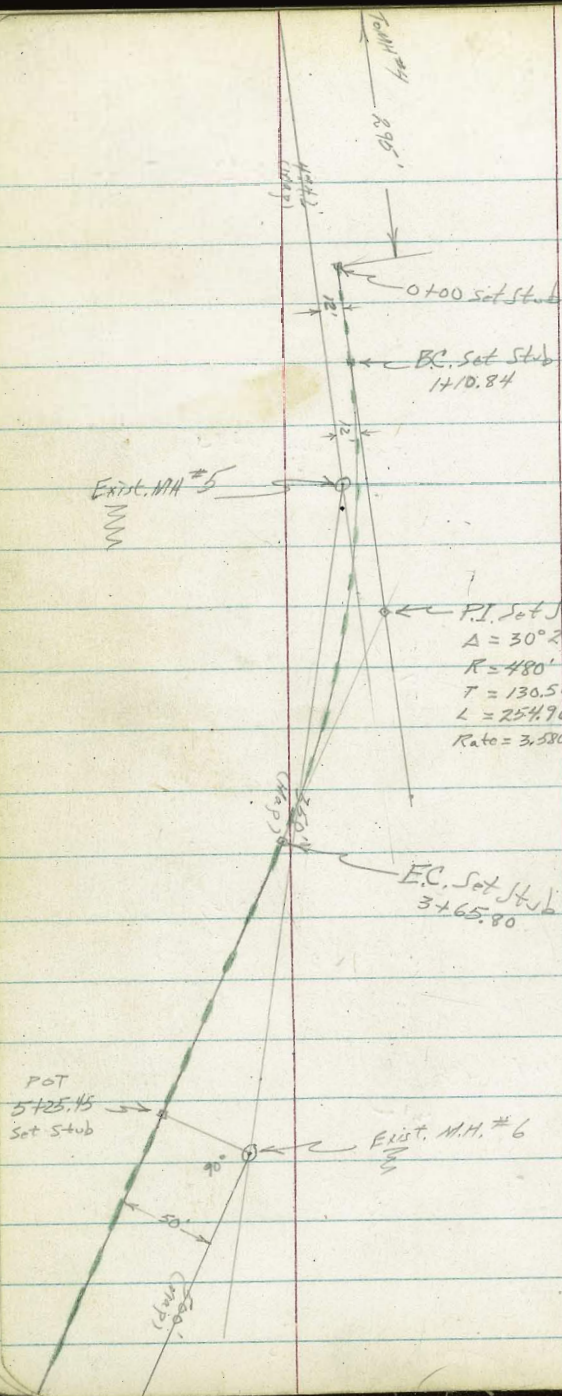
7.9

$\langle 205.19 \uparrow \rangle$

Roberts
Cota
Moore
Pullen
6-21-52
NO. 20988

Survey for proposed Storm
Drain in Arizona Canyon, Balboa Park





POT
 7+52.15
 Set Stub

10+25.27
 Set Stub
 POT

90°
 Exist. M.H. #7 See Page 3

11+12.21
 22+1.21

(499.9' & hand)
 (499.9' & hand)

Exist. M.H. #8 see page 3

1420 6⁵ Lt to center 10" Sycamore

1+10.84 BC

T.P. 4.90 227.31 π 11.64 222.41

0+85

0+50

0+00 Brush all the way

T.P. 0.70 234.05 π 13.03 233.35

T.P. 5.17 246.38 5.88 241.21

T.P. 0.66 247.09 13.04 246.43

T.P. 0.70 259.47 13.10 258.77

B.M. 1.92 271.87 269.95 NWBP
Upper Arizona

227.3
 00 227.4 222.4
 20 4.9 4.9 5.7 5.3 2.3
 2 6 17 20

227.31 π

230.0
 4.0 223.9 225.3 221.9 222.0
 20 10.1 10.7 12.1 12.0
 13 14 20

231.8
 2.2 226.0 225.6 1
 20 8.0 8.4 11.3 11.3 10.2 7.2
 1 3 13 15 20

234.0
 0 232.3 228.3
 20 17 5.7 6.3 7.8 10.5 7.8
 13 2 3 18 20

234.05 π

Cont'd From Page 22

1797

1790

1787

1757

1749

1742

1721

227.31A

24

8

Rt

23

219.0
8.3

219.6
7.7

222.7
5.6

221.6
5.7

226.8	220.5	221.0	222.0	224.3
0.5	6.8	6.3	5.3	3.0
20	6		2	20

221.2
6.1

222.3
5.0

227.31A

Cont'd From Page 23

2+74

2+50

2+41

2+38

5.5' Rt to center 6 Acaia Trees (2' cluster)

2+32

2+26

2+00

227.31A

44

8

77

24

224.5
2.8

225.6
1.7
20

222.8
4.5

221.5
5.8
10

219.8
7.5
15

219.1
8.2
20

222.1
5.2

220.3
7.0

220.3
7.0

218.8
8.5

225.7

1.6
20

224.2
3.1
15

6.2
10

7.0

8.3
5

6.0
16

5.5
20

227.31A

Cont'd From Page 24

Lt

Rt

Rt 25

3+89

213.2
14.1

3+82

213.6
13.7

3+79

215.7
11.6

3+65.80 EC

215.6
11.7
20

215.9
11.4

216.1
11.2
20

3+33

217.5
9.8

3+15

220.3
7.0

3+00

224.1
3.2
20

221.1
6.2

219.7
7.6
20

227.317

227.317

6+00

205.2	210.1	216.5	224.7	224.2
24.4	22.5	16.1	7.9	8.4
50	35	Top	13	20
			Top	

5+50

214.4	210.8	221.6	226.8	225.7
11.2	11.8	11.0	5.8	6.9
20		3	11	20
		Top	Top	

T.P.

7.67 232637 2.35 22496

232.6377

5+00

E is tool of fill on new truck trail.

210.4	210.5	218.2	228.1	227.6
16.9	16.8	9.1	10.8	10.3
20	19	Top	13	20
			Top	

4+50

220.8
6.5

4+20

216.8	220.7	225.0
10.5	6.6	2.3
20		20

3+93

218.6
8.7

227.317

227.317

Cont'd From Page 26

Lt

E

Rt

27

8+00

204.1
19.8
37

217.3
6.6
Too

227.1
+32
15

266.6
+2.7
20

7+55

213.6
10.3
20

222.3
1.6
Too

227.2
+33
9

226.2
+2.3
20

7+27

218.8
5.1

T.P.

180

223.87X

10.56

222.07

223.87X

6+95

219.2
18.4
20

216.1
16.5
16

221.0
11.6
Too

221.9
10.7
4

226.3
6.3
12
Top

225.9
6.7
20

6+71

217.1
15.5

6+50

215.5
17.1

232.63X

232.63X

Cont'd From Page 27

10+65

10+46

10+00

Still working on Tank Trail from here So.

9+70

9+50

9+00

8+50

22387A

Lt.

198.2	205.4	206.7
25.7	20.5	17.2
31	21	15

E

210.5	213.7
13.4	10.2
	8
	Toe

Rt.

217.8	218.1
6.1	5.8
14	20

28

210.5

13.4

203.1

213.8

216.5

217.7

222.0

221.4

20.8

10.1

7.4

6.2

1.9

2.5

30

8

5

11

20

Toe

214.7

9.2

217.6

6.3

211.5

217.3

225.9

225.4

12.4

6.6

12.0

11.5

20

Toe

12

20

219.1

4.8

22387A

Contd From Page 28

29

Check

9.60

190.93 = 190.87

Rim Existing MH * 8 See page 19

T.P.

1.97

200.53

12.90

198.56

T.P.

0.66

211.46

13.07

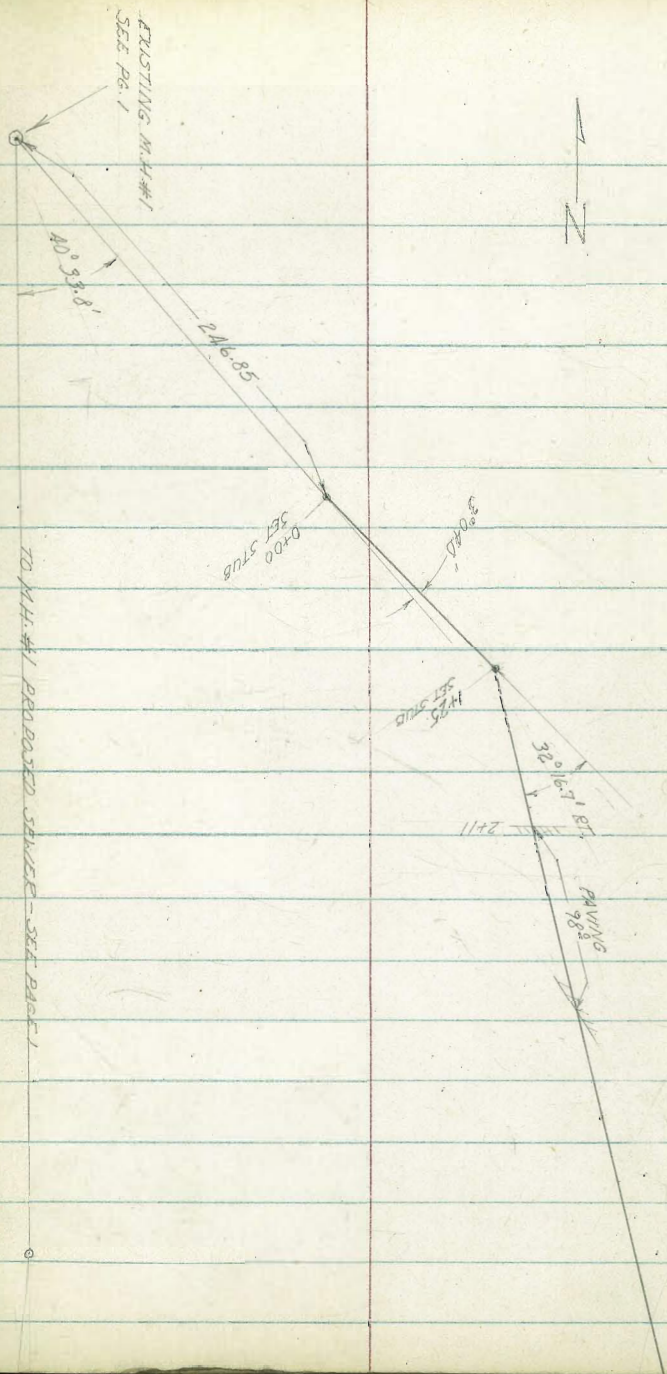
210.80

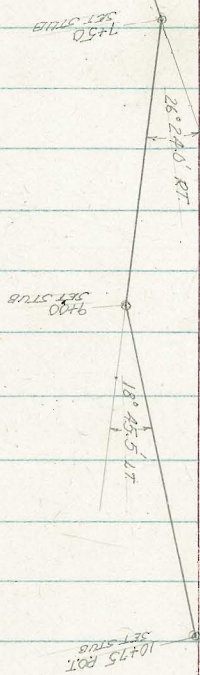
223.87

COTA
MOORE
PULLEN
7-2-52
W.O. #20988

SURVEY FOR PROPOSED
DRAINAGE DITCH IN
ARIZONA CANYON

INDEXED
2042
OCT 20 1952





LT.

£

RT

0+80

253.2
6.0 252.3
20 6.9 76
20

0+70

252.4 251.3 249.0 247.2
6.8 7.9 10.2 12.0
20 6 20

0+63

252.3 251.5 249.4 249.4 249.6
6.9 7.7 8.8 8.7 8.8 8.6
20 10 6 3 20

0+25

252.3 249.9 252.2 252.5 252.3
6.9 9.3 7.0 6.7 6.9
20 12 7 20

0+00 BEGIN PROPOSED DITCH

252.4 252.5 253.6
6.8 6.7 5.6
20 20

0-20

253.7
5.5

I.P. 183 259.18 12.62 257.35

B.M. 0.02 269.97 269.95 N.W.B.P. ARIZONA & UPAS

259.18 H.I.

4+00

254.36
 253.97
 252.8
 252.0
 6.44 6.83 8.0 8.8
 20 12.5 20
 E.P.

3+09 LINE CROSSES PAVING

254.08
 6.72

3+00

254.34
 254.16
 254.00
 252.6
 6.46 6.64 6.80 8.8
 20 2 20
 E.P.

2+11 LINE CROSSES PAVING

253.95
 6.85

2+00

256.7
 256.2
 254.1
 253.6
 4.1 4.6 6.7 7.8
 20 10 20

F.P.

4.17 260.80 H.I. 3.05 256.13

260.80 H.I.

1+25 ANGLE POINT RIGHT (ON SPLIT)

255.4
 254.1
 252.9
 3.8 5.1 6.3
 20 20

259.18 H.I.

259.18 H.I.

T.P. 193 256.61 H.L. 612 252.68

6+50

254.17
 253.78
 251.0
 249.3
 6.3 7.02 9.8 11.5
 20 12.5 20
 E.P.

6+00

253.76
 253.36
 254.7
 7.04 7.44 9.3 11.1
 20 12.5 20
 E.P.

5+50

253.88
 253.64
 252.6
 251.1
 6.92 7.6 8.2 9.7
 20 13.5 20
 E.P.

5+00

254.02
 253.81
 252.0
 252.0
 6.78 6.99 8.0 8.8
 20 13.5 20
 E.P.

4+50

254.24
 254.02
 254.3
 253.6
 6.56 6.78 6.5 7.2
 20 12.5 20
 E.P.

260.80 H.L.

260.80 H.L.

DRAINAGE DITCH, ARIZONA CANYON
CONT'D

L.T.

\$

RT

35

9+00 ANGLE POINT LT. (ON SPLIT)

254.2
58
20

252.9
71

251.9
81
20

8+50

254.3
57
20

253.1
69

251.7
83
20

8+00

255.0
50
20

253.5
65

252.2
78
20

T.P.

7.90 260.04 H.I. 447 252.14

260.04 H.I.

7+50 ANGLE POINT RIGHT (ON SPLIT)

256.29
0.32
20

256.19
0.42
16.5
E.P.

253.2
3.4

251.7
4.9
20

7+00

255.15
1.46
20

254.85
1.76
13.5
E.P.

252.7
3.9

250.8
4.0
20

256.61 H.I.

256.61 H.I.

10+75 POT.

252.2

251.4

250.2

48
2056
2068
20

10+50

253.8
32
20252.5
45
20250.9
61
20

10+00

254.0

252.7

251.6

3.0
204.3
205.4
20

9+76 8° RT. & 6" TREE

9+62 1° LT. & 8" TREE

9+53 6° LT. & 8" TREE

9+50

254.4

253.4

252.2

26
2036
2048
20

T.P.

427 256.97 H.I.

734 252.70

256.97 H.I.

CHECK B.M. 0.72 269.91 = 269.95 NW B.P. ARIZONA & UPAS

T.P. 1287 270.63 153 257.76

T.P. 462 259.29 1083 254.67

T.P. 607 265.50 194 259.43

T.P. 1305 261.37 865 248.32 (LARGE ROCK, 11+25)

11+25

248.5

8.5

250.1

11+00

66

256.97 H.I.

256.97 H.I.

Roberts,
Cota
Moore
Pollen
7-16-52
WD 20988

Location of Jacaranda Drive in Balboa Park

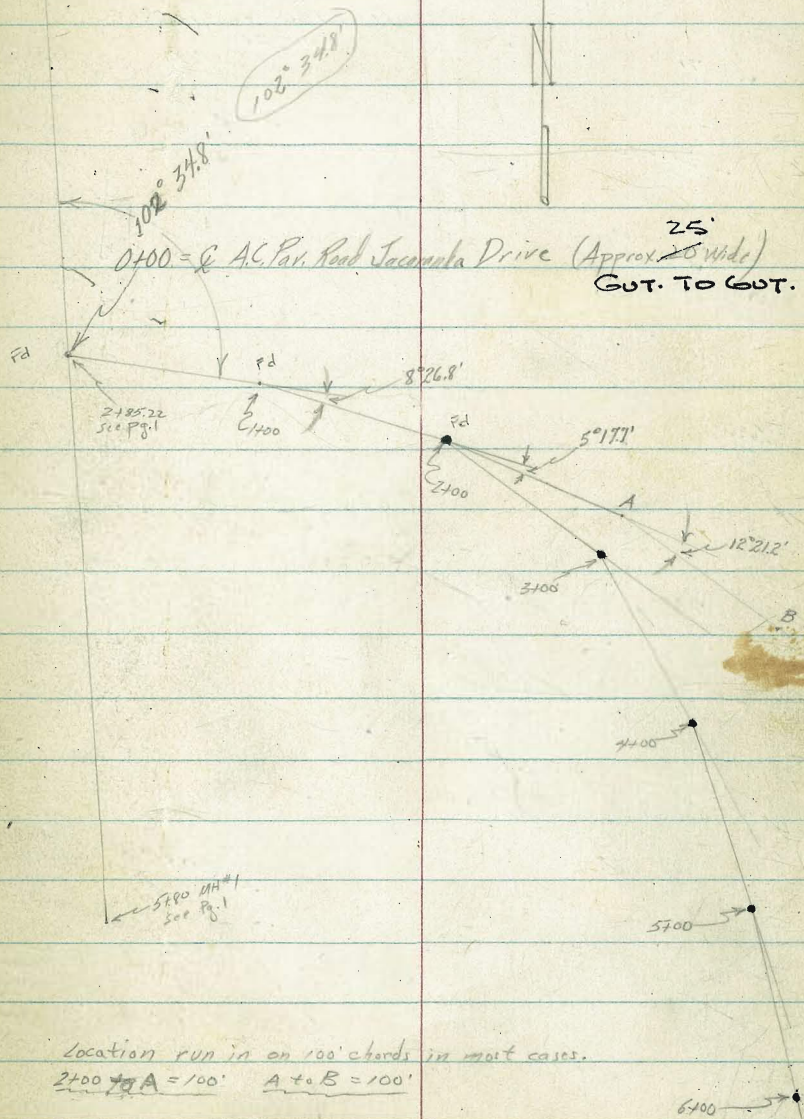
INCL. HATCH
10-18-71
P.K.'s EVERY 100'
CHORDS

EXIST MH#1
0+00
See Pg. 1

SEE BOOK 1A26 P. 42
FOR CORRECT ALIGNMENT.

Station	Deflection	
18+00		
17+00		6° 10' 00" RT.
16+00	Almost to Pershing Drive.	6° 06' 50" RT.
15+00	3° 52.0' Rt.	1° 52' 20" RT.
14+00	6° 38.2' Rt.	6° 13' 15" RT.
13+00	11° 51.1' Rt.	12° 24' 10" RT.
12+00	21° 54.2' Rt.	21° 09' 20" RT.
11+00	10° 59.4' Rt.	11° 05' 45" RT.
10+00	9° 03.8' Lt.	8° 51' 00" LT.
9+00	12° 30.2' Lt.	13° 04' 45" LT.
8+00	5° 56.6' Lt.	6° 03' 00" LT.
7+50	1° 58.3' Lt.	
7+00	2° 57.5' Lt.	4° 18' 40" LT.
6+00	0° 00.0'	0° 36' 10" RT.
5+00	4° 15.2' Rt.	2° 48' 20" RT.
4+00	10° 37.0' Rt.	11° 20' 15" RT.
3+00	24° 47.0' Rt.	21° 54' 50" RT.
2+00 ✓	18° 51.0' Rt. ✓	
1+00	8° 26.8' Rt.	

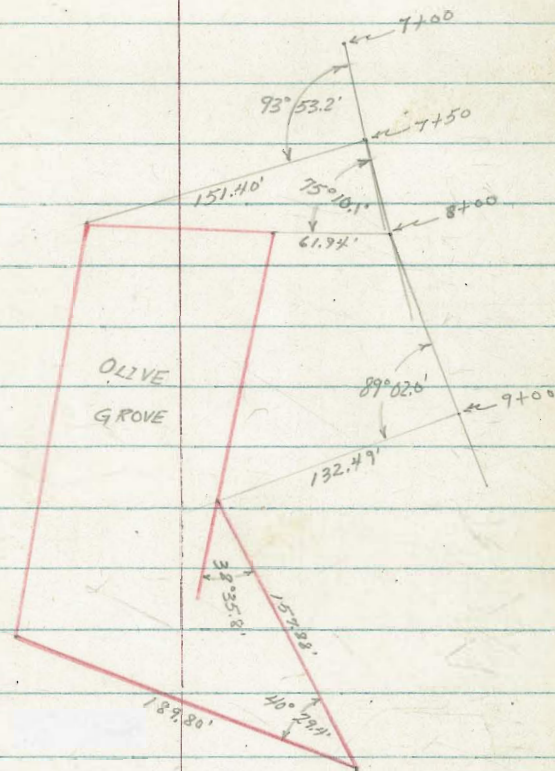
0+00 = Intersection of Proposed Sewer Line with
C of A.C. Pav. of Jacaranda Drive



Location run in on 100' chords in most cases.
2+00 to A = 100' A to B = 100'

Cont'd From Page 39

40



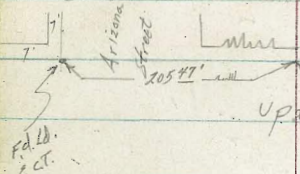
01
06
05

Roberts
Moore
Pollen

Survey Drainage Ditch Arizona Canyon

1 - - 52

W.O. 20988



UP25

6°12.9'

street

EC 2+38.42
st-b

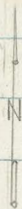
60' → 5+00

← 60' ←

Location Tacaranda Drive see page 31-39

← 60' ← 7+00

INDEXED
OCT 30 1952



AD 72

BC 4+66.10
st-b

A = 17° 21.4'

T = 68.22

L = 135.14'

R = 400'

arc - R.I. stub

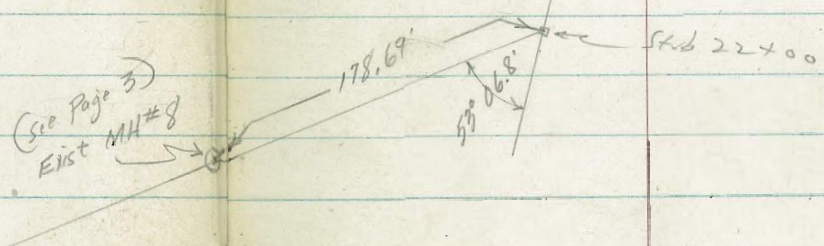
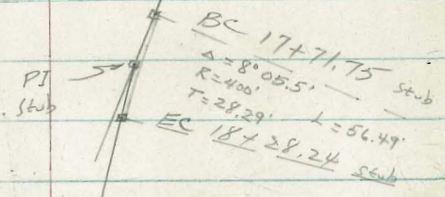
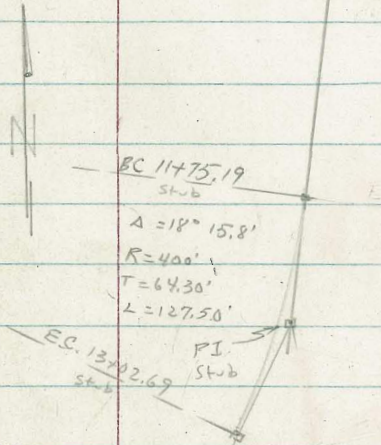
EC 6+01.24
st-b

4'x4' Conc. Box
Culvert

0+00

BC 1+61.04' st-b
Δ = 18° 53.6'
T = 48.74'
L = 96.99'
R = 400'

R.I. stub



Cont'd From Page 42

Lt

R

Rt

43

1+61.04 B.C.

251.8
3.3
25

250.5
4.5

249.8
5.7
25

1+51 25' Lt to center 14" Euc.

252.2
2.9
25

251.8
3.3
13

250.8
5.1

249.5
5.6
12

248.2
10.8
25

1+00 12' Rt to center 30" Euc.

0+97 10' Lt to center 24" Euc.

0+50 45' Rt to center 30" Euc Tree

0+44

250.2
4.9
25

249.1
8.0

248.2
10.9
18

247.2
11.9
25

0+00 E of Sky. Face 4x4' Conc. Box Culvert

243.35 Elev. Not a rod!
INVERT

T.P. 11.73 255.08 \nearrow 15.55 243.35 \checkmark INVERT 4x4' Conc. Box Culvert

255.08 \nearrow

T.P. 0.19 258.90 \nearrow 12.71 258.71 \checkmark

B.M. 1.47 271.42 \nearrow 269.95 NWBP Upos of Arizona

Cont'd From Page 43

Lt

R

Rt

44

3+86 5'Rt to center big bush.

3+82 7'Rt to center big bush.

3+70 14'Lt to center big bush.

3+50

257.5
3.1
25

250.5
4.5

249.2
4.7
25

3+00

252.5
2.2
25

251.8
3.2

250.3
3.7
25

T.P. 2.51 254.58[↓] 3.01 252.07[↓]

254.58[↓]

2+58.03 EC.

254.0
1.1
25

252.4
3.0

251.2
3.9
25

249.53²⁴ (Midpoint) Rt to center 18" Euc.

250.8
1.6
25

251.0
3.3

250.0
4.3
25

255.08[↓]

255.08[↓]

Cont'd From Page 44

Lt

R

Rt 45

5461 13' Rt to center 26" Euc.

5433.67 Midpoint

251.5
4.5
25

250.2
5.8

249.1
6.9
25

5419 4' Rt to center 16" Euc.

5412 14' Lt to center 28" Euc.

5402 1 $\frac{1}{2}$ ' Rt to center 12" Euc.

T.P. 5.68 256.02 ∇ 424 250.34 ∇ on Pt. Stub

256.02 ∇

4466.10 B.C.

250.5
4.1
25

249.2
6.3

248.5
8.0
25

4458 5' Rt to center 6" Euc.

4400

250.8
4.2
25

249.5
6.5

248.5
8.1
25

25458 ∇

25458 ∇

Cont'd From Page 45

Lt

E

Rt

46

7+47	8' Rt	} to center olive
7+46	6' Lt	
7+39	{ 10 1/2 Lt 15 Rt	
7+30	{ 4' Lt 7' Rt	
7+20	{ 7' Lt 3' Rt	
7+12	1' Rt	
7+10	10' Lt	
7+02	0 1/2 Lt	

7+00

252.8	252.1	252.5
3.2	3.9	3.5
25		25

6+76 13' Rt to center Olive

6+50

252.2	252.3	250.5
3.3	4.7	5.4
25		25

6+29 11' Lt to center 8" Euc.

6+01.24 E.C.

252.5	250.5	249.5
3.4	5.4	6.5
25		25

5+75 6' Rt to center Olive Tree

256.02 A

256.02 A

Contd From Page 46

T.P. 7.22 239.76 ∇ 11.91 238.54 ∇

9700

8765.31 P.O.T. Stub

8750

T.P. 0.73 250.45 ∇ 6.30 249.72 ∇

8715

8700

7756 10' Lt to center Olive

7750

256.02 ∇

Lt

R

Rt

47

²⁴⁷⁵
2.9
25

²⁴⁴⁵
5.9

²⁴¹²
9.1
25

^{250.01}
0.4
25

²⁴⁸⁸
1.5

²⁴⁷²
3.2
25

250.45 ∇

²⁵¹⁰
5.0

²⁵⁷²
4.8
25

²⁵⁰¹
5.3

²⁴⁹⁵
6.5
25

²⁵²⁸
3.6
25

²⁵¹⁰
5.0

²⁵⁷⁵
4.4
25

256.02 ∇

Contd From Page 47

10+40

T.P. 12.53 251.91A 0.38 239.38

10+25

10+05

9+85

9+60

9+35

239.76A

Lt

C

Rt

48

9.3

251.91A

1.8

8.4

10.7
25

12.7

13.1
25

7.2

1.2

239.76A

222.5

220.0

221.8

222.1

226.2

227.6

228.6

Contd From Page 48

13+02.69-EC

24

R

R7

49

2442

5.7

9.4

15.3

2452

25

25

12+38.74 Midpoint

2478

3.2

5.4

7.2

14.6

2478

2408

25

10

25

12+03

2512

3.3

2492

5.1

11.0

23.3

2440

2312

25

10

25

11+75.19 BC

2512

2.4

25

2512

3.6

20

2432

11.6

2402

24.1

25

T.P.

6.34

254.95 ✓

3.30

248.61 ✓

on P.O.T.

Sub

254.95 ✓

11+30

2508

1.1

25

2485

3.4

2485

3.4

3

2385

13.4

25

11+19.46 P.O.T. Sub

10+65

2402

3.7

25

2462

5.2

2422

9.0

25

251.91 ✓

251.91 ✓

Cont'd From Page 49

15750

T.P.

936

250.32A

1.45

240.96 on

POT stub

250.32A

15700 POT

15700

14780

14730

13780

T.P.

0.52

242.41A

13.06

241.89

254.95A

44

2

R4

50

462
4.1
25

240.2
10.1

232.8
18.0
25

244.6
42.2
25

240.8
1.6

234.6
7.8
25

250.0
4.4
25

238.8
6.0

232.8
9.6
25

220.2
22.2
25

216.2
24.2

212.2
25.2
25

240.5
1.8
25

234.1
7.7

230.5
12.0
25

242.41A

254.95A

Cont'd From Page 50

Lt

Q

Rt

51

17+99.99 Midpoint

^{253.4}
40.6
25

^{246.2}
6.1
25

^{288.2}
14.6
25

17+71.75 BC

^{259.2}
40.5
25

^{246.2}
6.5
25

^{286.2}
16.1
25

TP. 6.60 252.78 \nearrow 4.14 246.18 \downarrow on

P.T. Stub

252.78 \nearrow

17+50

^{257.2}
41.0
25

^{244.6}
5.7
25

^{276.2}
14.0
25

17+20

^{246.2}
4.0
25

^{240.2}
10.0
25

^{232.2}
18.0
25

16+50

^{246.2}
3.6
25

^{239.8}
10.5
25

^{232.0}
18.3
25

16+00

^{246.2}
3.6
25

^{239.6}
10.7
25

^{231.2}
18.6
25

250.32 \nearrow

250.32 \nearrow

Cont'd From Page 51

20x40 P.O.T.

20x00

19x82

19x50

19x05

18x80

18x28.24 E.C.

252.78x

Lt

^{247x}
5.4
25

^{250x}
2.5
25

^{251x}
1.6
25

^{251x}
1.5
25

^{253x}
7.1
25

^{254x}
7.8
25

^{254x}
7.4
25

^{245x}
7.3
5

^{247x}
5.7
13

^{249x}
3.6
12

^{246x}
7.8
25

^{244x}
7.4
25

^{242x}
10.5

^{244x}
8.8

^{243x}
9.7

^{239x}
13.0

^{243x}
9.6

^{247x}
5.5

^{246x}
6.1

Rt

^{232x}
20.1
25

^{240x}
18.8
25

^{241x}
21.1
25

^{238x}
24.7
25

^{230x}
22.3
25

^{233x}
15.0
25

^{239x}
14.2
25

52

252.78x

Cont'd From Page 52

22400

232¹/₂
73.7

225²
4.7

217⁵/₁
12.4

25

25

21465

230⁸
70.9

222²
7.0

215²
14.6

25

25

21450

230²
71.0

221²
8.2

215²
14.7

212⁸
17.5

25

13

25

21430

228⁸
45.5

226³
3.6

219⁰
10.9

25

25

T.P.

2.82

229.86¹/₁ 13.16 227.04¹/₁

229.86¹/₁

21400

232⁸
0.8

232²
8.0

225¹/₁
15.1

25

25

T.P.

0.36

240.20¹/₁ 12.94 239.84¹/₁

240.20¹/₁

252.78¹/₁

Cont'd From Page 53

54

Reduced By CRK 10-9-52

Check

1498 190.91' E

190.87' REN N.H. #8 See page 19

T.P.

0.56

205.89'

13.10

205.33'

T.P.

0.15

218.43'

11.58

218.28'

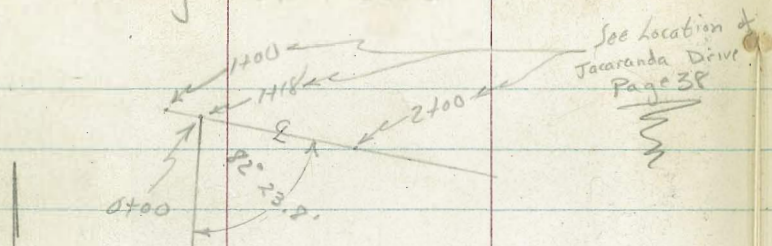
229.86 A

Roberts
10-8-52

Location of Arizona Canyon Sanitary Fill Road

Indexed

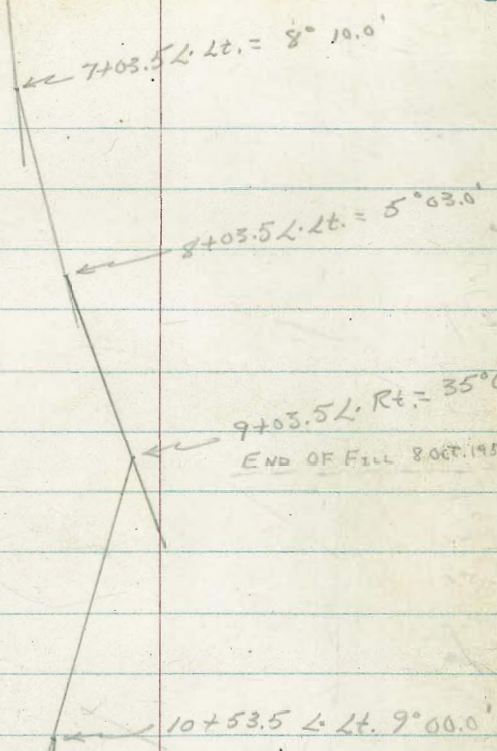
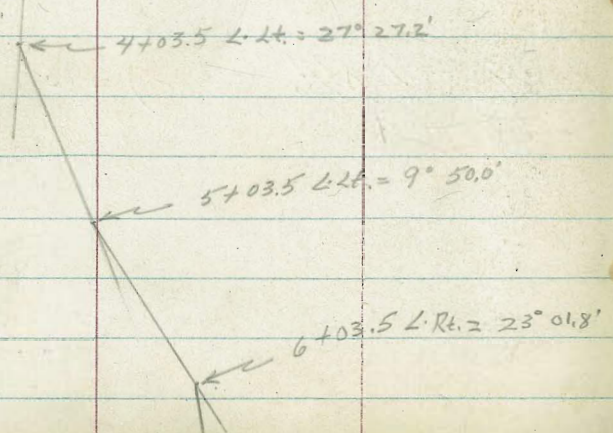
55



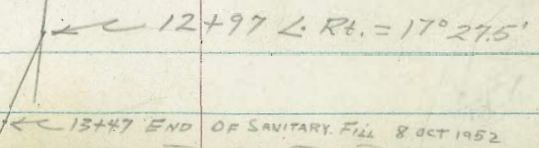
See Location of
Jacaranda Drive
Page 38

Line is $\frac{3}{4}$ Wly. of Ely. Edge of Road.

Road varies from 20' to 30'
wide. At fill is tore up.



END OF FILL 8 OCT. 1952



END OF SANITARY FILL 8 OCT 1952

Cont'd From Page 55

16.12+97

N

18+60 L. Lt 10°00.0'

56

23+10

Tie to MH

92° 13.3'

75.75

Existing MH #8

(27+58.37)

(See page 3)

Roberts Location of Trees in Arizona
Canyon (Above sanitary fill and
8 Oct 1952 below 4'x4' conc. box culvert)

See page 20 - Exist MHR is 0+00 ;
MH3-1+40 ; MH4-4+01.3 ; this
base line is at MH4 to MH5.

- 0+38 5' Lt to center of cluster 7" Acacias.
- 0+80 44 Lt to center 36" Euc.
- 1+30 6' Lt to center 36" Euc.
- 1+93 28' Lt to center 24" Euc.
- 2+20 11' Lt to center 30" Euc.
- 2+37 22' Lt to center 24" Euc.
- 2+41 37' Lt to center 18" Euc.
- 2+79 12' Lt to center 6" Euc.
- 2+97 5' Lt to center 6" Euc.
- 3+00 27' Lt to center 24" Euc.
- 3+28 22' Lt to center 18" Euc.
- 3+35 50' Lt to center 16" Euc.
- 3+65 25' Lt to center 30" Euc.
- 4+61 11' Rt to center 12" Sycamore

57

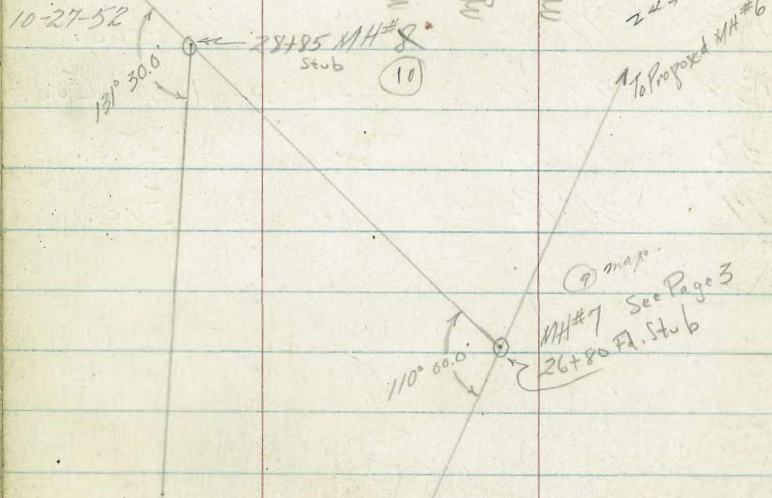
- 4+62 4' Lt to center 12" Pepper
- 4+83 48' Lt to center 16" Euc.
- 5+34 44' Lt to center Dead 36" Euc.
- 5+50 40' Lt to center 60" Euc.
- 7+17 30' Rt to center 30" Euc.

Roberts
Cota
Moore
Pitten

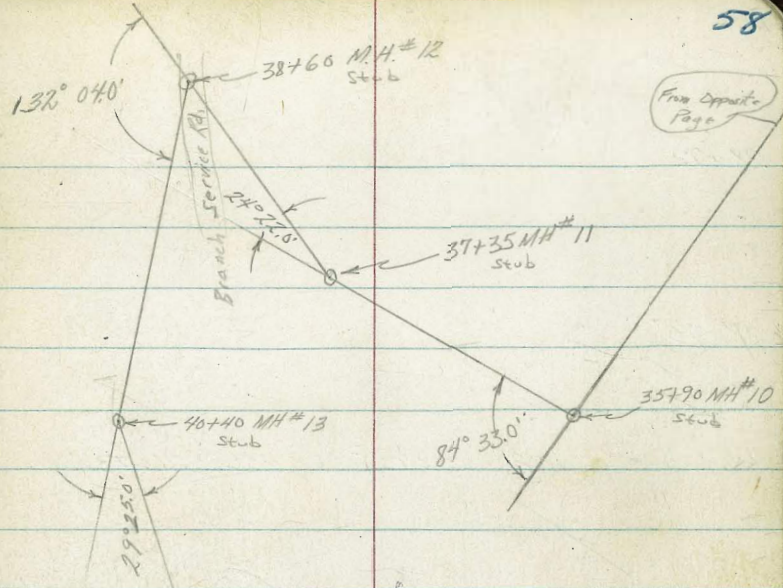
Extend Survey for Proposed Sewer in Arizona Canyon Balboa Park

W.O.# 20988
10-27-52

See Page 2nd.

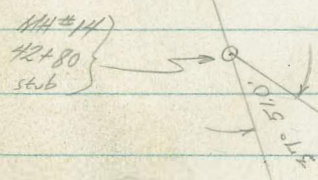


To Opposite Page



From Opposite Page

INDEXED
Law
OCT 30 1952



Service Pad

45+7230
Existing M.H.#10
Continuation of Numbering
From Page 3.

28772

252.9
10.0

28745

250.6	253.3	258.1	262.8
123	96	42	0.1
15	5		20

T.P.

220 $\left\langle \begin{array}{c} \downarrow \\ 262.93 \text{ A} \\ \downarrow \end{array} \right\rangle$ 456 $\left\langle \begin{array}{c} \downarrow \\ 260.73 \\ \downarrow \end{array} \right\rangle$ $\left\langle \begin{array}{c} \downarrow \\ 262.93 \text{ A} \\ \downarrow \end{array} \right\rangle$

28700

257.9	260.4	261.7	264.0
74	49	3.6	1.3
22 Rim	12		20

27765

260.0	262.3	263.7
5.3	3.0	16
20 Rim		20

27730

258.9	260.0	260.0
6.4	5.3	5.3
20		20

26780

MH #7

See pages 3 & 17

258.9 (Elev.)

T.P.

1247

 $\left\langle \begin{array}{c} \downarrow \\ 265.29 \text{ A} \\ \downarrow \end{array} \right\rangle$ $\left\langle \begin{array}{c} \downarrow \\ 252.82 \\ \downarrow \end{array} \right\rangle$ Page 17
on Stob MH #7 $\left\langle \begin{array}{c} \downarrow \\ 265.29 \text{ A} \\ \downarrow \end{array} \right\rangle$

Cont'd From Page 59

230+75

241.9 ✓ 21.0 20	249.3 ✓ 13.6 10	254.1 ✓ 8.8	258. ✓ ✓ 4.7 20
-----------------------	-----------------------	----------------	-----------------------

230+41

250.9 ✓
10.0

2

30+60

240.0 ✓ 22.0 23 Bottom	254.4 ✓ 8.5	259.6 ✓ 3.3 20
---------------------------------	----------------	----------------------

2

29+65

253.6 ✓
9.3

2

29+45

244.1 ✓ 18.8 20 Bottom	256.1 ✓ 6.2	261.3 ✓ 1.6 20
---------------------------------	----------------	----------------------

2

28+85 MH#8

Sidings taken R. 2 to forward target

260.1 ✓ 2.8 15	255.3 ✓ 7.6 8	259.6 ✓ 3.3 4	260.4 ✓ 2.7	262.9 ✓ 0 20
----------------------	---------------------	---------------------	----------------	--------------------

2

28+81

259.6 ✓
3.3

2

262.93 ✓

262.93 ✓

Cont'd From Page 60

33+25

32+75 MH#9

(Section taken on split)

32+47

32+18

TP

2.29

254.70

10.52

252.47

31+75

31+25

262.93

Lt.

Q

R

61

244.7
10.0
20

250.3
44

253.4
13
20

242.9
11.8
20

249.3
54

252.1
26
20

247.1
76
20

249.0
57
14

250.6
41

254.7
0
20

250.3
44
20

252.8
19

255.1
10.4
20

249.9
13.0
20

252.4
10.7

256.5
64
20

246.7
162
20

254.1
10.8

257.1
58
20

262.93

35790 NH#10

(Section taken as Split.)

$$\begin{array}{r} \checkmark \\ 245.0 \\ 12.9 \\ 20 \end{array}$$

$$\begin{array}{r} \checkmark \\ 250.0 \\ 7.9 \end{array}$$

$$\begin{array}{r} \checkmark \\ 253.5 \\ 4.4 \\ 20 \end{array}$$

35770

$$\begin{array}{r} \checkmark \\ 247.1 \\ 10.8 \\ 20 \end{array}$$

$$\begin{array}{r} \checkmark \\ 252.0 \\ 5.9 \end{array}$$

$$\begin{array}{r} \checkmark \\ 254.9 \\ 3.0 \\ 20 \end{array}$$

35725

$$\begin{array}{r} \checkmark \\ 247.6 \\ 10.3 \\ 20 \end{array}$$

$$\begin{array}{r} \checkmark \\ 252.1 \\ 5.8 \end{array}$$

$$\begin{array}{r} \checkmark \\ 256.0 \\ 1.9 \\ 20 \end{array}$$

T.P.

456

 $\langle 257.86T \rangle$

140

 $\langle 253.30 \rangle$
 $\langle 257.86T \rangle$

34775

$$\begin{array}{r} \checkmark \\ 247.7 \\ 20 \\ 20 \end{array}$$

$$\begin{array}{r} \checkmark \\ 253.0 \\ 1.7 \end{array}$$

$$\begin{array}{r} \checkmark \\ 255.3 \\ 10.6 \\ 20 \end{array}$$

34725

$$\begin{array}{r} \checkmark \\ 248.0 \\ 6.7 \\ 20 \end{array}$$

$$\begin{array}{r} \checkmark \\ 251.7 \\ 3.0 \end{array}$$

$$\begin{array}{r} \checkmark \\ 255.0 \\ 10.3 \\ 20 \end{array}$$

33775

$$\begin{array}{r} \checkmark \\ 246.3 \\ 8.4 \\ 20 \end{array}$$

$$\begin{array}{r} \checkmark \\ 251.1 \\ 3.6 \end{array}$$

$$\begin{array}{r} \checkmark \\ 254.7 \\ 0 \\ 20 \end{array}$$
 $\langle 254.70T \rangle$
 $\langle 254.70T \rangle$

Contd From Page 62

63

38723

✓ 240.2	✓ 240.6	✓ 243.6	✓ 247.6
10.2	9.8	6.8	2.8
20	3		20

37775

✓ 243.0	✓ 246.7	✓ 251.0
7.4	3.7	10.6
20		20

T.P.

1.00 <250.44T> 8.42 <249.44>

<250.44T>

37735 MH # 11

(section taken on split)

✓ 245.1	✓ 249.44	✓ 253.5
12.8	8.42	1.4
20		20

36780

✓ 249.7	✓ 255.0	✓ 257.6
8.2	2.9	0.3
20		20

36750

✓ 251.9	✓ 255.1	✓ 257.8
6.0	2.8	0.1
20		20

36707

✓ 247.9	✓ 252.7	✓ 254.8
10.0	3.2	3.1
20		20

<257.86T>

<257.86T>

Cont'd From Page 63

39+40

39+00

38+80

38+60 M.H. 12

(Section taken R/L to forward tangent.)

T.P.

3.54

247.66

6.32

244.12 M.H. 12

38+47 E. Service Road

38+26

250.44

Lt

Q

R/L

64

235.0
12.7
20

234.6
13.1
10

238.2
9.3
8

242.0
5.7

248.2
70.5
20

243.2
4.5

242.2
5.5

243.7
4.0
20

244.6
3.1
10

244.2
3.5
3

244.1
3.6
3

247.5
0.2
6

249.8
72.1
20

243.5
6.9

241.2
9.2

250.44

42+00

 \checkmark
 236.2
 16.3
 20
 \checkmark
 241.5
 11.0
 \checkmark
 245.2
 7.3
 20

41+60

 \checkmark
 242.4
 10.1

41+40

 \checkmark
 238.1
 17.4
 20
 \checkmark
 239.1
 13.4
 10
 \checkmark
 241.5
 11.0
 \checkmark
 247.5
 5.0
 20

40+90

 \checkmark
 230.5
 22.0
 20
 \checkmark
 235.5
 17.0
 15
 \checkmark
 241.4
 11.1
 \checkmark
 247.5
 5.0
 20

T.P.

 $8.54 \left\langle 252.53\pi \right\rangle$
 $3.67 \left\langle 243.99 \right\rangle$
 $\left\langle 252.53\pi \right\rangle$

40+40 MH#13

(Section taken on right.)

 \checkmark
 237.5
 10.2
 20
 \checkmark
 243.99
 3.67
 \checkmark
 249.6
 1.9
 20

39+90

 \checkmark
 226.9
 20.8
 22
 \checkmark
 234.4
 13.3
 18
 \checkmark
 242.5
 5.2
 \checkmark
 246.4
 1.3
 20
 $\left\langle 247.66\pi \right\rangle$
 $\left\langle 247.66\pi \right\rangle$

Contd From Page 65

43+70

T.P. 0.51 $\left\langle \begin{array}{c} 231.93 \\ \nearrow \searrow \end{array} \right\rangle 12.72 \left\langle \begin{array}{c} 231.42 \\ \nearrow \searrow \end{array} \right\rangle$

43+30

43+05

T.P. 0.50 $\left\langle \begin{array}{c} 244.14 \\ \nearrow \searrow \end{array} \right\rangle 8.89 \left\langle \begin{array}{c} 243.67 \\ \nearrow \searrow \end{array} \right\rangle$

42+80 NH#14 (section taken on split)

42+60

42+40

$\left\langle \begin{array}{c} 252.53 \\ \nearrow \searrow \end{array} \right\rangle$

Lt

R

R

66

223.1 ✓
8.8

$\left\langle \begin{array}{c} 231.93 \\ \nearrow \searrow \end{array} \right\rangle$

235.4 ✓
8.7

238.9 ✓
5.2

$\left\langle \begin{array}{c} 244.14 \\ \nearrow \searrow \end{array} \right\rangle$

241.8 ✓
10.7
20

243.6 ✓
8.89

245.0 ✓
7.5
20

244.9 ✓
7.6

241.7 ✓
10.8
20

244.7 ✓
7.8

247.5 ✓
5.0
20

$\left\langle \begin{array}{c} 252.53 \\ \nearrow \searrow \end{array} \right\rangle$

Cont'd From Page 66

26

E

R7 67

T.P. 0.14 $\langle 181.43\pi \rangle$ 12.72 $\langle 181.29 \rangle$

44+92

187.1
6.9

T.P. 0.30 $\langle 194.01\pi \rangle$ 12.94 $\langle 193.77 \rangle$

$\langle 194.01\pi \rangle$

44+72

193.3
13.3

T.P. 0.13 $\langle 206.65\pi \rangle$ 12.78 $\langle 206.52 \rangle$

$\langle 206.65\pi \rangle$

44+35

205.3
14.0

T.P. 0.24 $\langle 219.30\pi \rangle$ 12.87 $\langle 219.06 \rangle$
Step, isn't it?

$\langle 219.30\pi \rangle$

43+88

219.8
12.11

$\langle 231.93\pi \rangle$

$\langle 231.93\pi \rangle$

Cont'd From Page 67

Lt

Rt

Rt

68

check

191 190.90 = 190.87

See page 19

T.P.

1168

192.91

030

181.13

45772.30

Existing M.H.

167.25
19.18
Invert
167.25
14.18
Rim

45744

168.5
13.1

45727

East Edge Service Road

179.6
1.8

45700

West Edge Service Road

178.2
3.2

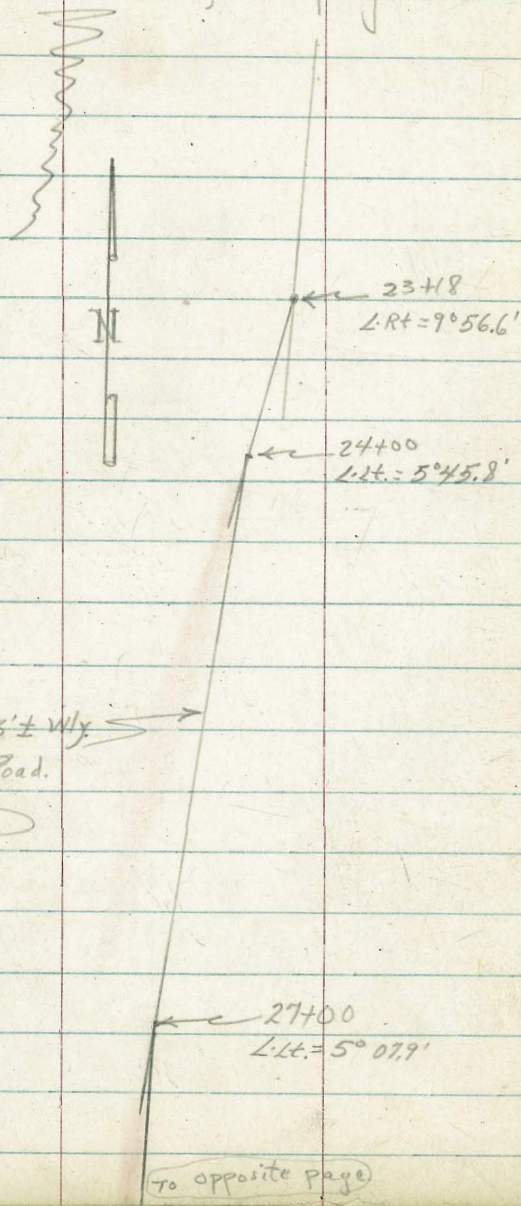
< 181.43 >

< 181.43 >

Roberts
Cota
Moore
Fullen
10-28-52
W.O. 20788

Location of Arizona Canyon Sanitary Fill Road

Continued from page 56



Cont'd on next page

From opposite page

69

Indexed

2+01.3
 $\angle Rt = 16^{\circ} 13.0'$

0+00

$90^{\circ} 22.8'$

28+78.7
 $\angle Rt = 7^{\circ} 38.8'$

30+62
 $\angle Rt$

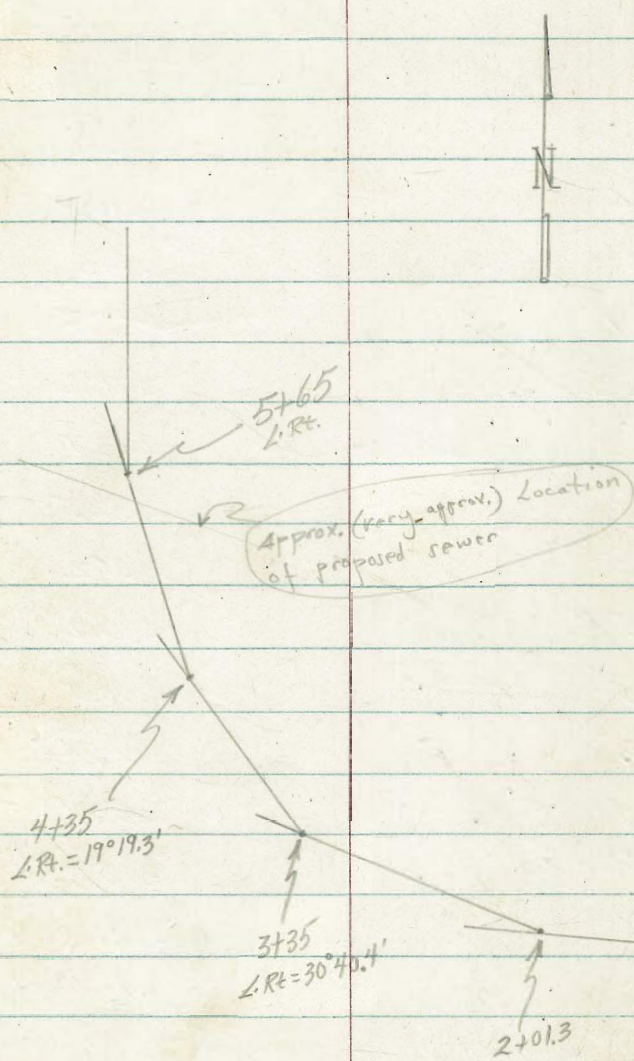
0+26.26

MH #10
(See Pg. 58)

Just a tie not intersection
with proposed

BRANCH OF SERVICE ROAD

Angle points all fall approximately in
center of the branch road.



From Preceding Page

Branch of Service Road Cont'd.

Roberts
 lots
 Moore
 Pallen
 10-29-52
 W.D. 20984

Profile of Service Road and
 Branch Service Road in Arizona
 Canyon in Balboa Park.
 See Pages 55, 56, 69 & 70

Indexed

16+00		223.9
15+00		224.0
14+00		223.3
12+97		225.4
12+53.5		226.2
11+53.5	IN FILL	223.7
10+53.5	IN FILL	223.5
9+03.5		229.2
8+03.5		235.2
7+03.5		240.5
6+03.5		245.8
5+03.5		252.8
4+03.5		255.3
3+00		253.6
2+00		253.1
0+00	Q Jacaranda Drive, Service Road	254.4

1+00	187.9
0+00 = 28+78.7	178.2
Branch Road ↑	
30+62	179.3
30+00	178.9
29+00	178.3
28+78.7 = 0+00 Branch Rd.	178.2
28+00	183.2
27+00	191.5
26+00	194.8
25+00	197.6
24+00	200.9
23+18	201.9
22+00	209.8
21+00	213.5
20+00	215.2
19+00	217.8
18+60	218.4
18+00	219.6
17+00	222.4

TBM

24335 INVERT BOX CULVERT

Direct Elevation Rod Used.

Cont'd From Page 71

72

check

244.17 = 244.12 St. b MH #12 See page 64

5+65

245.2

4+35

228.2

3+35

212.6

2+01.3

197.5

~~1434 NO. EDGE PAVING, AC.~~

~~1400~~

~~3450~~

~~3400~~

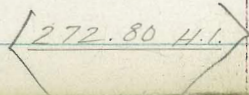
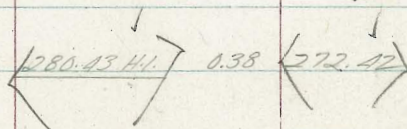
T.P.

2460 W. EDGE PAVING, AC.

2430

1492 EAST EDGE PAVING, AC.

Revised from 3475
See 2205
23



LT.

\$

RT.

273.9
6.5

274.6
7.8
20

273.4
7.0

273.6
6.8
20

252.38

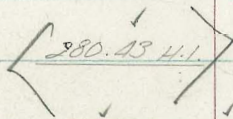
273.2
7.2

271.7
8.7
20

271.4
8.0

271.2
8.2
20

I.G.
252.16



270.8
2.0
20

271.2
1.6

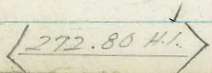
271.2
0.6
20

270.9
1.9

269.5
3.5
20

269.7
3.1

270.5
2.3
20



8+16 ANGLE PT (ON SPLIT)

8+00 EAST EDGE AC PAVING

7+87 10° LT, FIRE HYD.

7+83 12° RT 8" TREE, & 8° LT 10" TREE

7+50

T.P

285

280.30 H.I.

298

277.45

7+00

6+50

6+00

5+87 SO. EDGE AC PAVING

5+00 ON AC

280.43 H.I.

275.2
5.1
20

275.5
4.8
20

276.0
4.3
20

275.6
4.7

250.78

276.6
3.7

280.30 H.I.

278.5
1.9
20

278.3
2.1
20

277.8
2.6
20

251.18

278.9
2.1

277.7
2.7
20

277.2
3.2
20

277.4
3.0
20

251.58

277.0
3.1

276.4
2.0
20

276.7
3.7
20

277.0
3.1
20

251.98

280.43 H.I.

Revised
see
4705
2
3

10400

272.4
81
20272.0
83
20272.0
83
20

249.98

9450

273.2
7.1

250.18

9411 ANGLE PT. (ON SPLIT)

274.7
5.6
20274.1
5.6
7274.4
5.9
7274.8
5.5
20

9407 13° LT & 6.5 RT. END CBS.

8484 86.5 RT. S.E. COR. CHAIN LINK FENCE (TENNIS CT)

8452 57.5 LT. CORNER BLDG. (PINNAC)
NW.

8450

275.2
5.1
ON AC.

8403 19° LT 15" TREE & 119 RT. 8" TREE

8437 8.5 RT. 4" TREE & 15.3 LT. CLUMP OF 3" TREES

8433 13° LT & 6.5 RT. BEGIN CBS.

260.30

280.30

11455 1/2 INTERSECT. EAST. SEWER

248.9 ✓
216
GROUND

249.36

11420

256.5 ✓
12.0

249.50

T.P.

300 270.52 H.I. 1282 267.48

270.52 H.I.

11400 EDGE OF CANYON

267.4 ✓
12.9
20

267.5 ✓
12.8

267.0 ✓
13.3
20

249.58

10450

280.30 H.I.

269.7 ✓
10.6

249.78

280.30 H.I.

1+14 11' Lt to 8" Acacia Tree

1+00

0+84 12' Lt to 8" Acacia Tree
8' Rt to 10" Acacia Tree

0+68 12⁵' Lt to 8" Acacia Tree

0+50

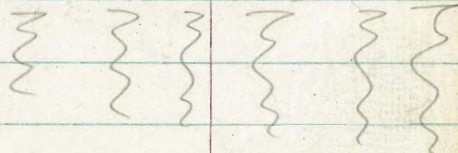
0+49 8' Lt to 12" Euc. Tree

0+30 9⁵' Lt to 6" Acacia Tree

0+14 11⁵' Lt to 8" Euc. Tree

OUTS ARE TO CENTER OF TREE.

0+03



0+01

0+00 N.W. Corner Shuffle Board Court Toilets
Sewer Cleanout within 2' of this corner

BM

5.29 / 275.24

269.95 NWB ^{Base 25} _{Up 25}

Arizona

274.0 ✓
1.2

272.8 ✓
2.4

273.3 ✓
1.9

270.1 ✓
5.1

269.52 ✓
5.92 Floor
270.1 ✓
5.1 Ground

275.24

1+14

1+00 3+50.05 = 3+75

0+8 3+32 12³' Rt to 10" Euc. Tree0+6 3+24 7⁵' Rt to 10" Euc. Tree

0+5 3+22

0+49

0+30 3+15 No. Edge A.C. Pavc

0+14

3+00

0+03

2+50

0+01 2+35 So. Edge A.C. Pavc

2+00

0+00

1+50

BVI

275.24

272.9
2.3memo
IG
252A8
262.5
IG
252A8
262.5272.5
2.7271.8
3.4272.0
3.2272.1
3.1271.7
3.5271.0
4.2271.4
3.8

275.24

1+14

1+00

0+8

0+6

0+5

0+49

0+30

0+14

0+03

0+01

0+00

BM

184.50

401.2
140.
261.2

297.5837
26 80
278
127

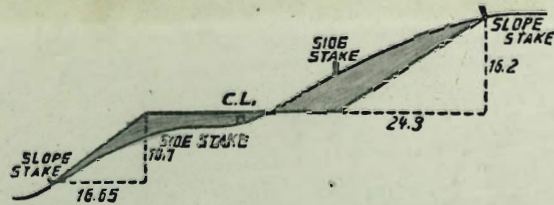
310
24.78
285.22

202.65
1823
184.42

1418
5
1418

9.54
737
7695

257.79
044
258.437
1309
245.34
028
245.628
11.68
233.94
5.54
228.12



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.
SLOPE 1 1/2 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05	4.20	4.35	2
3	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	3
4	6.00	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7.50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9.00	9.15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10.65	10.80	10.95	11.10	11.25	11.40	11.55	11.70	11.85	7
8	12.00	12.15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13.50	13.65	13.80	13.95	14.10	14.25	14.40	14.55	14.70	14.85	9
10	15.00	15.15	15.30	15.45	15.60	15.75	15.90	16.05	16.20	16.35	10
11	16.50	16.65	16.80	16.95	17.10	17.25	17.40	17.55	17.70	17.85	11
12	18.00	18.15	18.30	18.45	18.60	18.75	18.90	19.05	19.20	19.35	12
13	19.50	19.65	19.80	19.95	20.10	20.25	20.40	20.55	20.70	20.85	13
14	21.00	21.15	21.30	21.45	21.60	21.75	21.90	22.05	22.20	22.35	14
15	22.50	22.65	22.80	22.95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24.15	24.30	24.45	24.60	24.75	24.90	25.05	25.20	25.35	16
17	25.50	25.65	25.80	25.95	26.10	26.25	26.40	26.55	26.70	26.85	17
18	27.00	27.15	27.30	27.45	27.60	27.75	27.90	28.05	28.20	28.35	18
19	28.50	28.65	28.80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30.00	30.15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31.50	31.65	31.80	31.95	32.10	32.25	32.40	32.55	32.70	32.85	21
22	33.00	33.15	33.30	33.45	33.60	33.75	33.90	34.05	34.20	34.35	22
23	34.50	34.65	34.80	34.95	35.10	35.25	35.40	35.55	35.70	35.85	23
24	36.00	36.15	36.30	36.45	36.60	36.75	36.90	37.05	37.20	37.35	24
25	37.50	37.65	37.80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39.00	39.15	39.30	39.45	39.60	39.75	39.90	40.05	40.20	40.35	26
27	40.50	40.65	40.80	40.95	41.10	41.25	41.40	41.55	41.70	41.85	27
28	42.00	42.15	42.30	42.45	42.60	42.75	42.90	43.05	43.20	43.35	28
29	43.50	43.65	43.80	43.95	44.10	44.25	44.40	44.55	44.70	44.85	29
30	45.00	45.15	45.30	45.45	45.60	45.75	45.90	46.05	46.20	46.35	30
31	46.50	46.65	46.80	46.95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48.00	48.15	48.30	48.45	48.60	48.75	48.90	49.05	49.20	49.35	32
33	49.50	49.65	49.80	49.95	50.10	50.25	50.40	50.55	50.70	50.85	33
34	51.00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52.50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54.00	54.15	54.30	54.45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55.50	55.65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57.45	57.60	57.75	57.90	58.05	58.20	58.35	38
39	58.50	58.65	58.80	58.95	59.10	59.25	59.40	59.55	59.70	59.85	39
40	60.00	60.15	60.30	60.45	60.60	60.75	60.90	61.05	61.20	61.35	40
41	61.50	61.65	61.80	61.95	62.10	62.25	62.40	62.55	62.70	62.85	41
42	63.00	63.15	63.30	63.45	63.60	63.75	63.90	64.05	64.20	64.35	42
43	64.50	64.65	64.80	64.95	65.10	65.25	65.40	65.55	65.70	65.85	43
44	66.00	66.15	66.30	66.45	66.60	66.75	66.90	67.05	67.20	67.35	44
45	67.50	67.65	67.80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69.00	69.15	69.30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70.50	70.65	70.80	70.95	71.10	71.25	71.40	71.55	71.70	71.85	47
48	72.00	72.15	72.30	72.45	72.60	72.75	72.90	73.05	73.20	73.35	48
49	73.50	73.65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

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